

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.

UTU-01198-B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

UNIT #891008900A

8. Lease Name and Well No.

NBU 1022-22G

9. API Well No.

43047-38794

10. Field and Pool, or Exploratory

NATURAL BUTTES

11. Sec., T., R., M., or Blk, and Survey or Area

SEC. 22, T10S, R22E

12. County or Parish

UINTAH

13. State

UTAH

1a. Type of Work: ☒ DRILL

☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

☐ Single Zone ☒ Multiple Zone

2. Name of Operator

KERR MCGEE OIL & GAS ONSHORE LP

3A. Address

1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)

(435) 781-7024

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface

SWNE 2277'FNL, 1791'FEL

At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office\*

35 MILES SOUTHEAST OF OURAY, UTAH

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

1791'

16. No. of Acres in lease

2040.00

17. Spacing Unit dedicated to this well

40.00

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

REFER TO  
TOPO C

19. Proposed Depth

7990'

20. BLM/BIA Bond No. on file

BOND NO: WY-2357

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

4927'GL

22. Approximate date work will start\*

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized office.

25. Signature

Name (Printed/Typed)

SHEILA UPCHEGO

Date

10/26/2006

Title

REGULATORY ANALYST

Name (Printed/Typed)

BRADLEY G. HILL

Date

11-07-06

Title

Office ENVIRONMENTAL MANAGER

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Federal Approval of this  
Action is Necessary

RECEIVED

NOV 01 2006

DIV. OF OIL, GAS & MINING

T10S, R22E, S.L.B.&M.

# Kerr-McGee Oil & Gas Onshore LP

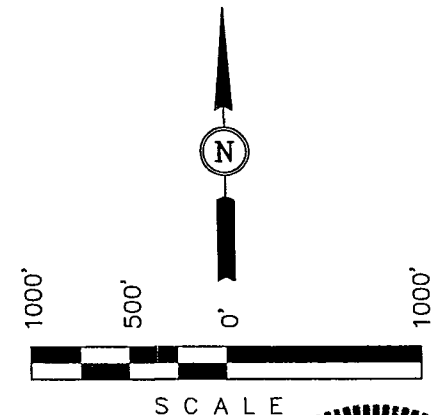
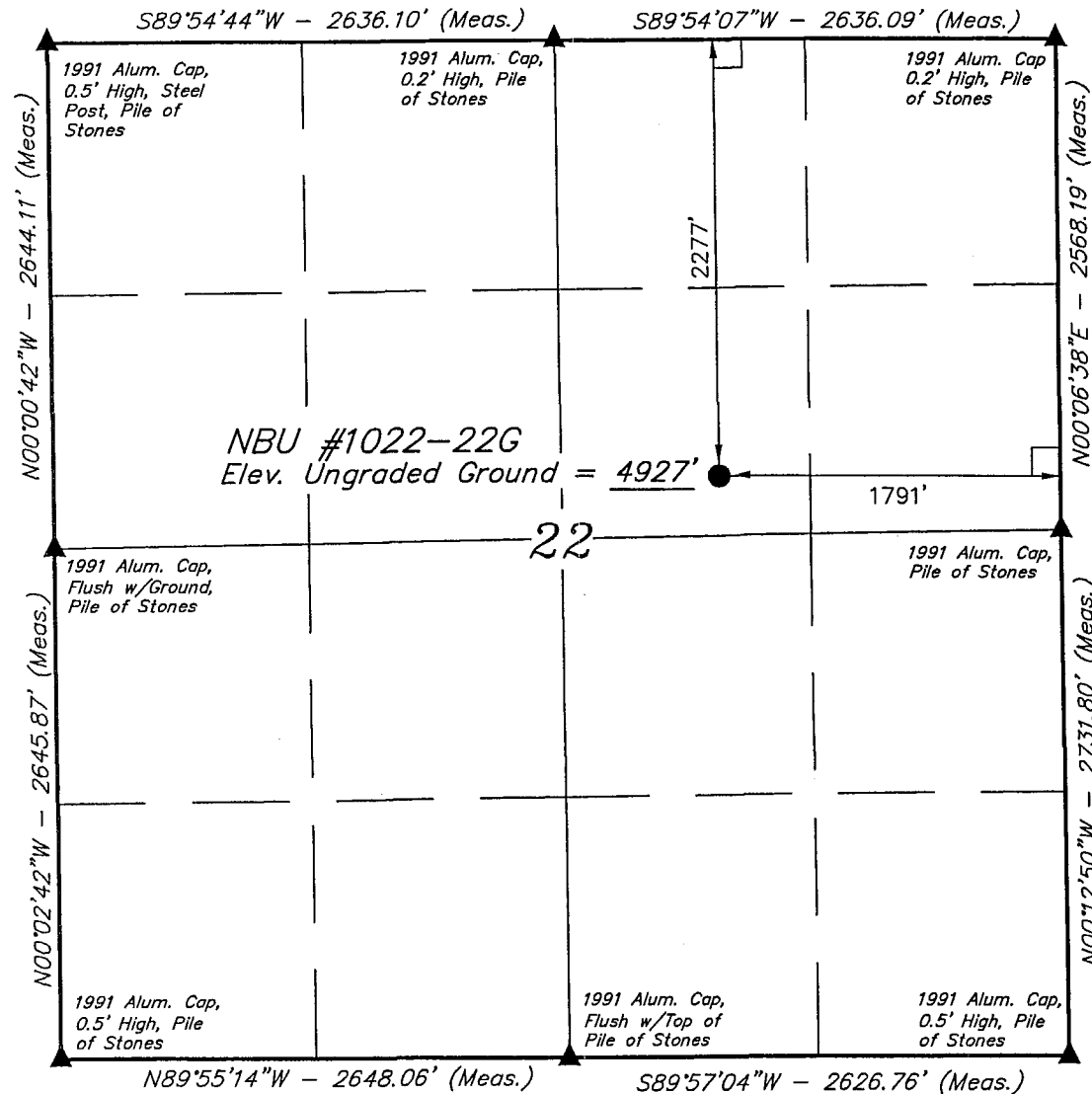
Well location, NBU #1022-22G, located as shown in the SW 1/4 NE 1/4 of Section 22, T10S, R22E, S.L.B.&M., Uintah County, Utah.

## BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.

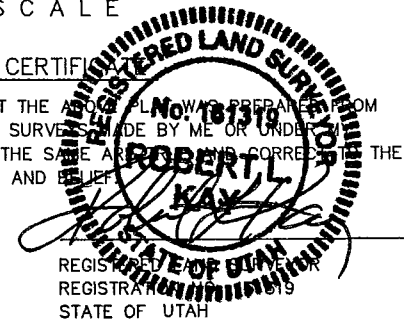
## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFY

THIS IS TO CERTIFY THAT THE ABOVE PLANS WERE PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



## LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 39°56'07.33" (39.935369)  
 LONGITUDE = 109°25'22.58" (109.422939)  
 (NAD 27)  
 LATITUDE = 39°56'07.45" (39.935403)  
 LONGITUDE = 109°25'20.13" (109.422258)

UINTAH ENGINEERING & LAND SURVEYING  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 08-02-06	DATE DRAWN: 08-04-06
PARTY D.R. A.H. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

NBU #1022-22G  
SWNE SEC 22, T10S, R22E  
UINTAH COUNTY, UTAH  
UTU-01198-B

ONSHORE ORDER NO. 1

***DRILLING PROGRAM***

1. **Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	719'
Top of Birds Nest Water	903'
Mahogany	1441'
Wasatch	3661'
Mesaverde	5953'
MVU2	6889'
MVL1	7432'
TD	7990'

2. **Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	719'
	Top of Birds Nest Water	903'
	Mahogany	1441'
Gas	Wasatch	3661'
Gas	Mesaverde	5953'
Gas	MVU2	6889'
Gas	MVL1	7432'
Water	N/A	
Other Minerals	N/A	

3. **Pressure Control Equipment** (Schematic Attached)

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

4. **Proposed Casing & Cementing Program:**

*Please see the Natural Buttes Unit SOP.*

5. **Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

6. **Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 7990' TD, approximately equals 4954 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3196 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please see Natural Buttes Unit SOP.*

10. **Other Information:**

*Please see Natural Buttes Unit SOP.*

**KERR-McGEE OIL & GAS ONSHORE LP**

## DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	October 25, 2006
WELL NAME	<b>NBU 1022-22G</b>	TD	7,990' MD/TVD
FIELD	Natural Buttes	COUNTY	Uintah
		STATE	Utah
		ELEVATION	4,927' GL KB 4,942'
SURFACE LOCATION	SWNE SEC. 22, T10S, R22E 2277'FNL, 1791'FEL	BHL	Straight Hole
	Latitude: 39.935369	Longitude: 109.422939	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 32.3#, H-40, STC	Air mist
Catch water sample, if possible, from 0 to 3,661'	Green River @ 0,719' Top of Birds Nest Water @ 903' Mahogany @ 1,441' Preset f/ GL @ 1,460' MD				
Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.					
Mud logging program TBD Open hole logging program f/ TD - surf csg			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	Water/Fresh Water Mud 8.3-11.5 ppg
	Wasatch @ 3,661'				
	Mverde @ 5,953'				
	MVU2 @ 6,889'				
	MVL1 @ 7,432'				
	TD @ 7,990'				Max anticipated Mud required 11.5 ppg



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

## CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				2270	1370	254000
SURFACE	9-5/8"	0 to 1460	32.30	H-40	STC	0.75***** 7780	2.01 6350	6.15 201000
PRODUCTION	4-1/2"	0 to 7990	11.60	I-80	LTC	2.58	1.33	2.48

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)  
2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)  
(Burst Assumptions: TD = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore  
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
MASP 3020 psi

\*\*\*\*\* Burst SF is low but csg is much stronger than formation at 2000' EMW @ 2000' for 2270# is 21.8 ppg or 1.13 psi/ft

## CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
NOTE: If well will circulate water to surface, option 2 will be utilized							
SURFACE Option 2	LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	170	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,160'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	350	60%	11.00	3.38
	TAIL	4,830'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	1350	60%	14.30	1.31

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

## FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

## ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

Brad Laney

DATE: \_\_\_\_\_

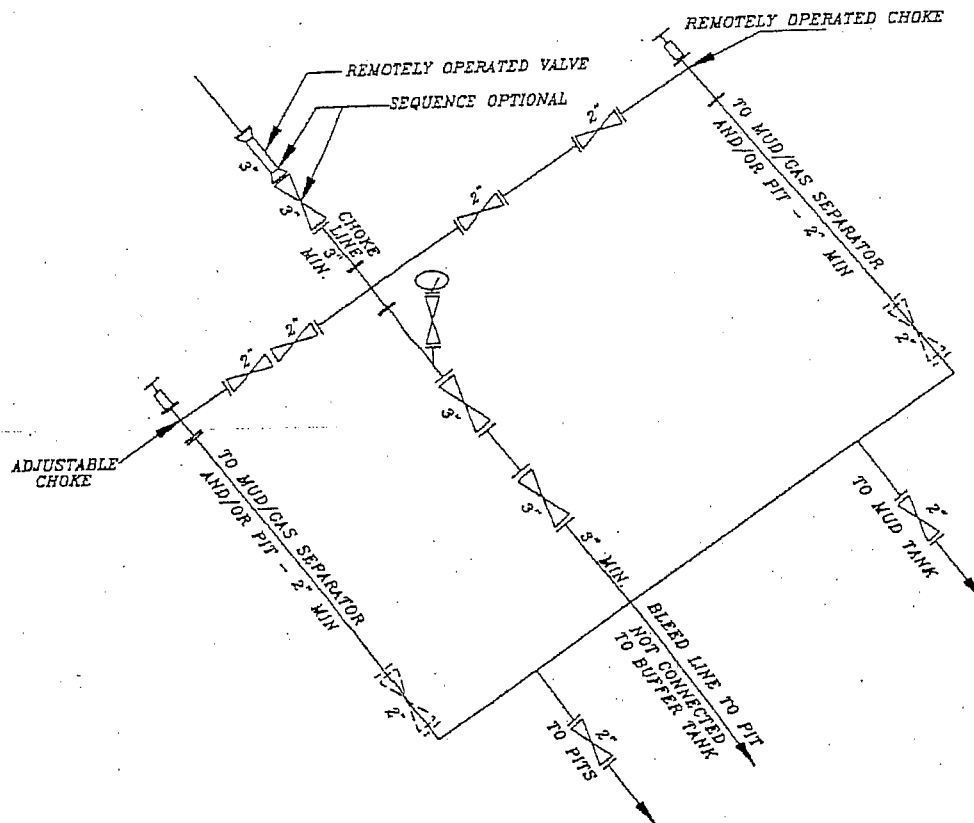
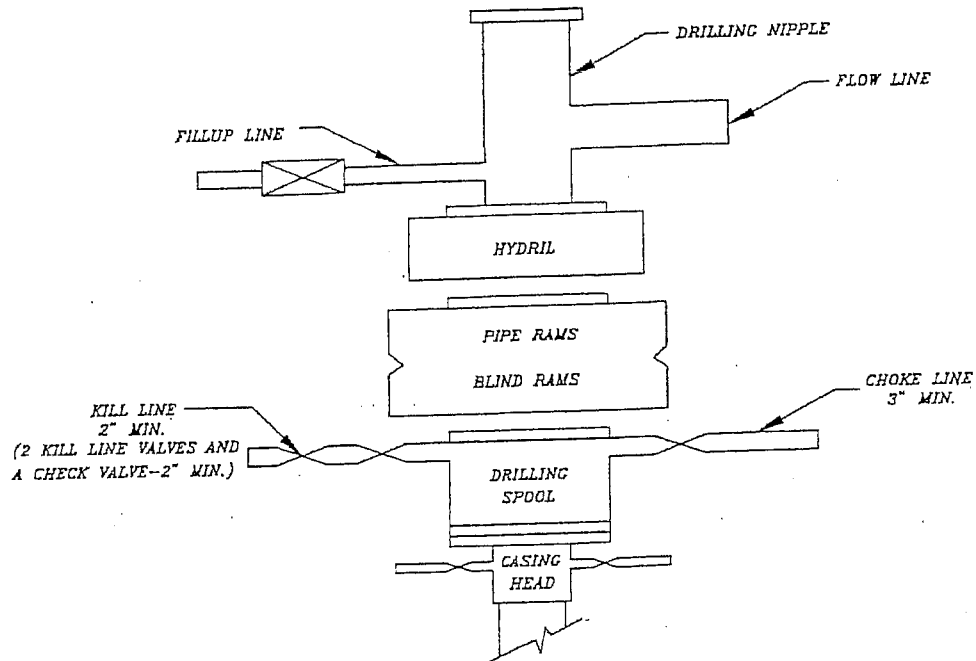
DRILLING SUPERINTENDENT:

Randy Bayne

DATE: \_\_\_\_\_

NBU1022-22G DHD.xls

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



G7  
NBU #1022-22H  
SENE SEC 22, T10S, R22E  
UINTAH COUNTY, UTAH  
UTU-01198-B

**ONSHORE ORDER NO. 1**

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

**1. Existing Roads:**

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

**2. Planned Access Roads:**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

Approximately 0.4 +/- miles of new access road. Please refer to the attached Topo Map B.

**3. Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

*Please see the Natural Buttes Unit SOP.*

**Variances to Best Management Practices (BMPs) Requested:**

Approximately 2169' +/- of 4" pipeline is proposed from the location to an existing pipeline. The pipeline shall be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

**5. Location and Type of Water Supply:**

*Please see the Natural Buttes SOP.*



6. **Source of Construction Materials:**

*Please see the Natural Buttes SOP.*

7. **Methods of Handling Waste Materials:**

*Please see the Natural Buttes SOP.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (*Request is in lieu of filing Form 3160-5, after initial production*).

8. **Ancillary Facilities:**

*Please see the Natural Buttes SOP.*

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A 20 mil reserve pit liner with felt will be used. As discussed at the on-site inspection.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

*Please see the Natural Buttes SOP.*

When the pit is backfilled, the topsoil pile shall be spread on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The following seed mixture will be used to reclaim the surface for interim reclamation using appropriate reclamation methods. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Galleta Grass                      20 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. **Surface Ownership:**

The well pad and access road are located on lands owned by:

United States of America  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078  
(435)781-4400

12. **Other Information:**

A Class III Archaeological Survey Report No. 06-428, completed on October 4, 2006 for the well location; The paleontological Survey Report No. 06-255 completed on September 8, 2006; these reports are being submitted along with the Application for Permit to Drill (APD).

**WILDLIFE STIPULATIONS:**

**GOLDEN EAGLE:** No construction or drilling from February 1<sup>st</sup> – July 15<sup>th</sup>. – Inactive nest if it becomes active with a two year delay. The operator will check with the BLM Biologist.

13. **Lessee's or Operator's Representative & Certification:**

Sheila Ucphego  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7024

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7018

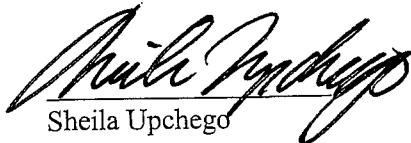
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by BLM Nationwide Bond #WY-2357.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Sheila Upchego10/26/2006

Date

Kerr McGee Oil & Gas Onshore LP  
NBU #1022-22G  
SECTION 22, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SHEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 10.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE BEGINNING OF THE PROPOSED ROAD RE-ROUTE TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 360' TO THE BEGINNING OF PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 130' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 55.3 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-22G  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 22, T10S, R22E, S.L.B.&M.

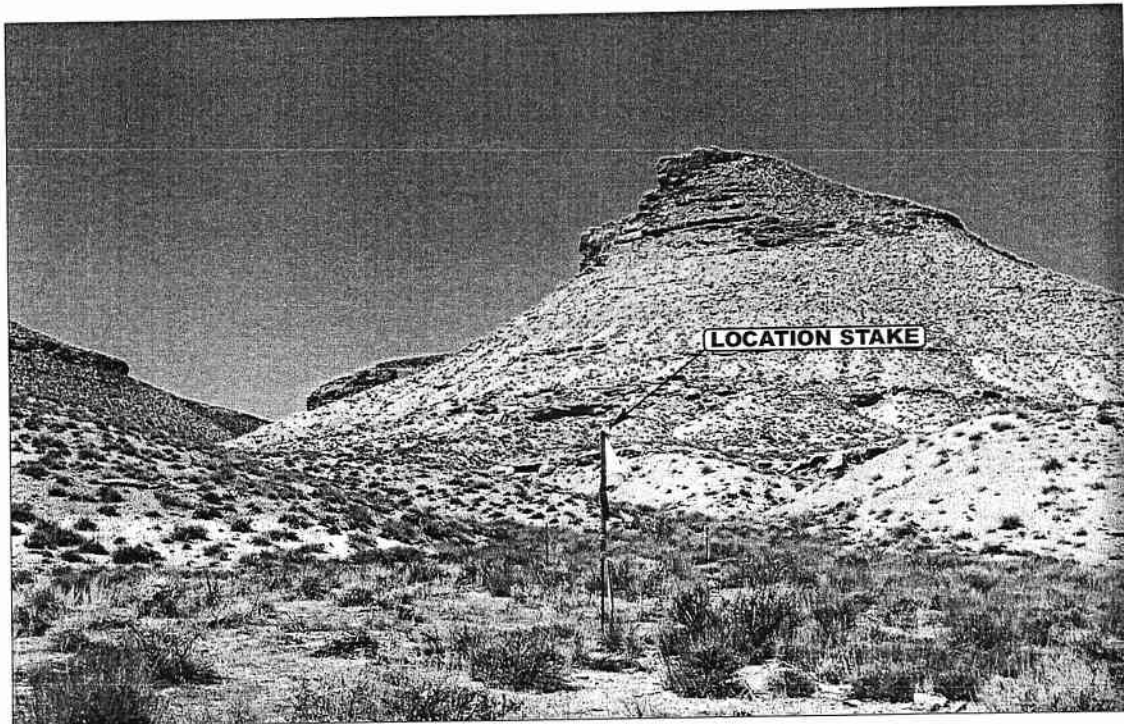


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



- Since 1964 -

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

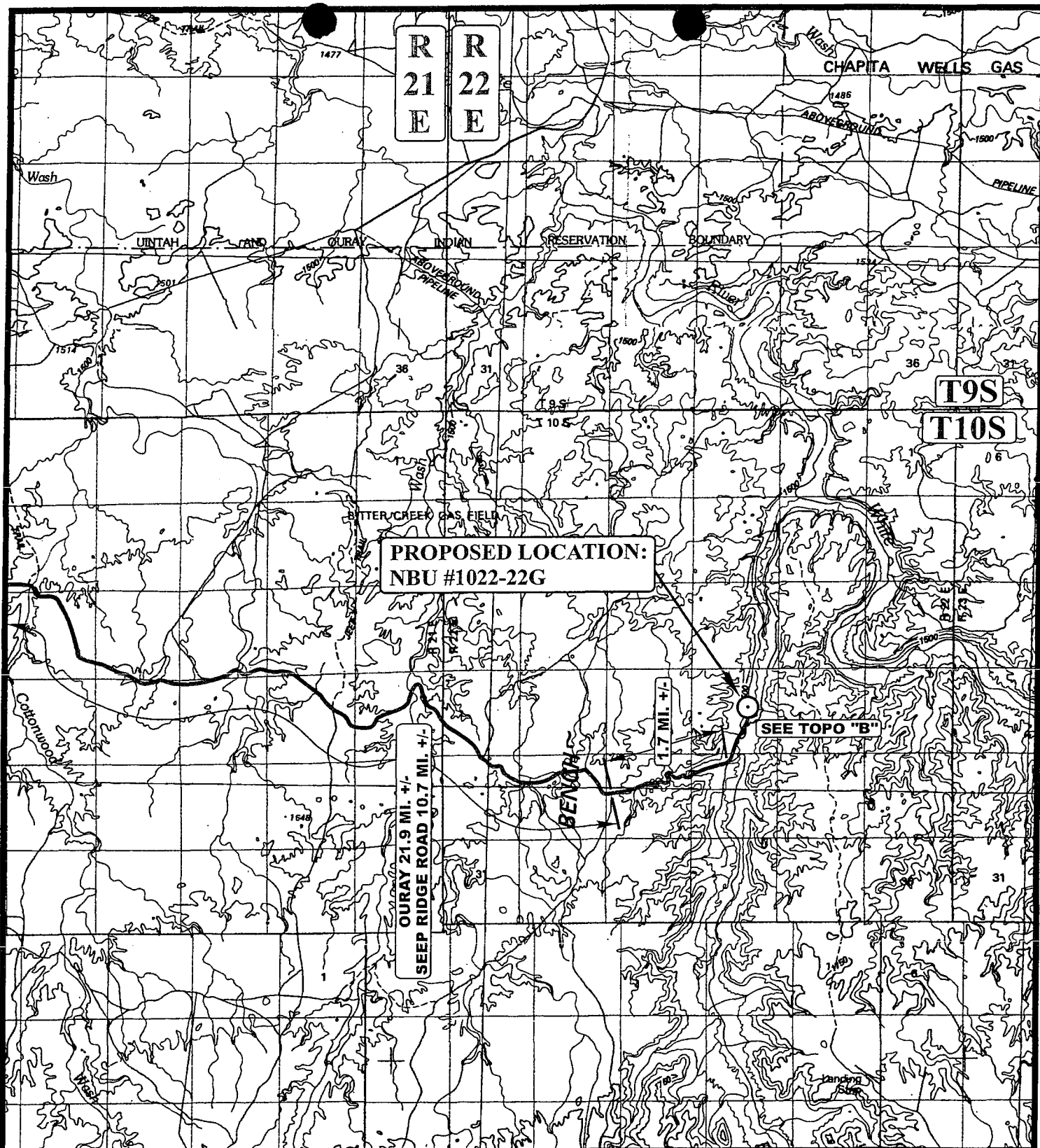
08 06 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: B.H.

DRAWN BY: L.K.

REVISED: 00-00-00



# LEGEND:

○ PROPOSED LOCATION



Kerr-McGee Oil & Gas Onshore LP

NBU #1022-22G

SECTION 22, T10S, R22E, S.L.B.&M.

2277' FNL 1791' FEL



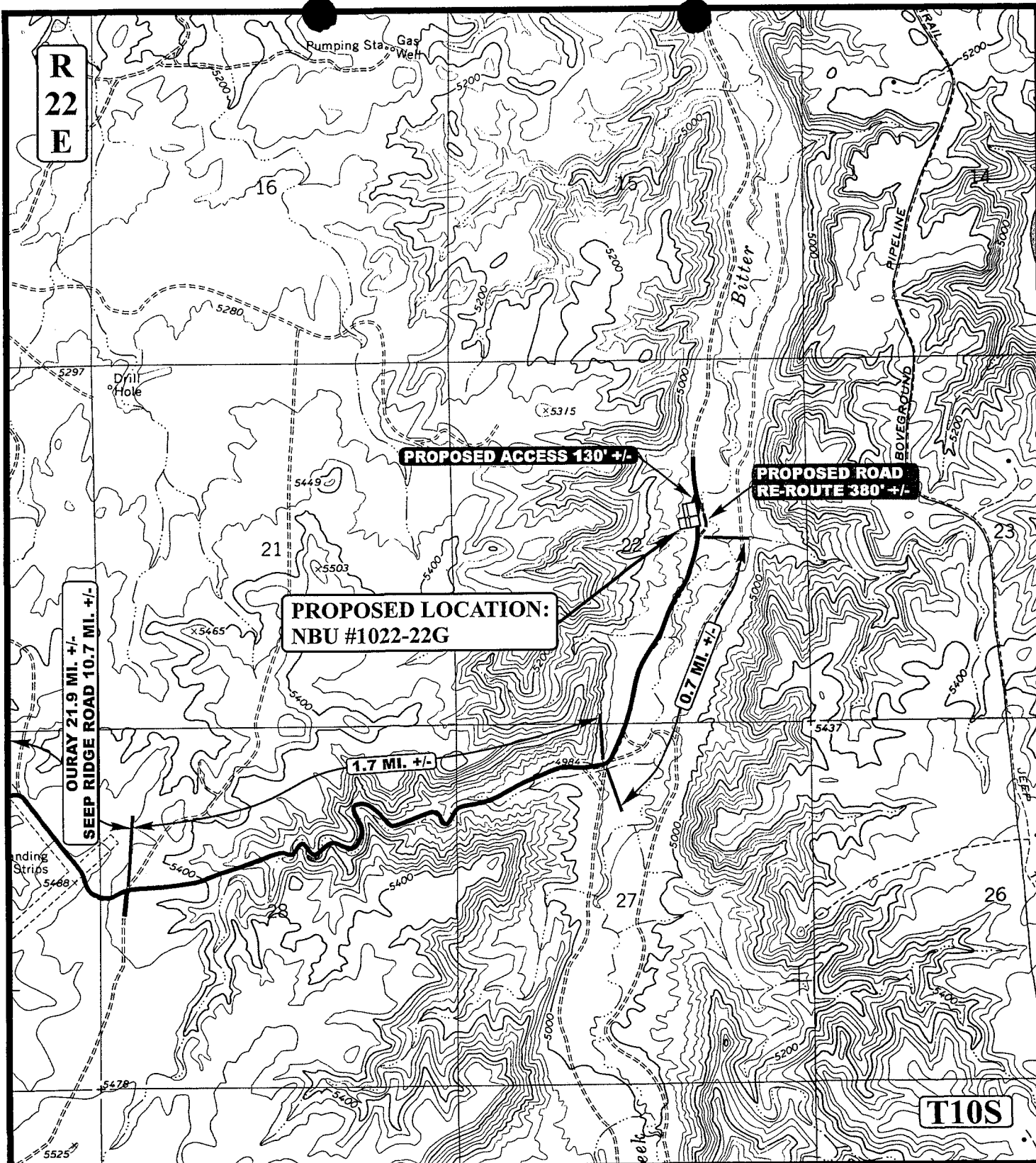
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

08	06	06
MONTH	DAY	YEAR

SCALE: 1:100,000 DRAWN BY: L.K. REVISED: 00-00-00





# LEGEND:

EXISTING ROAD  
 PROPOSED ACCESS ROAD

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-22G

SECTION 22, T10S, R22E, S.L.B.&M.

2277' FNL 1791' FEL



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



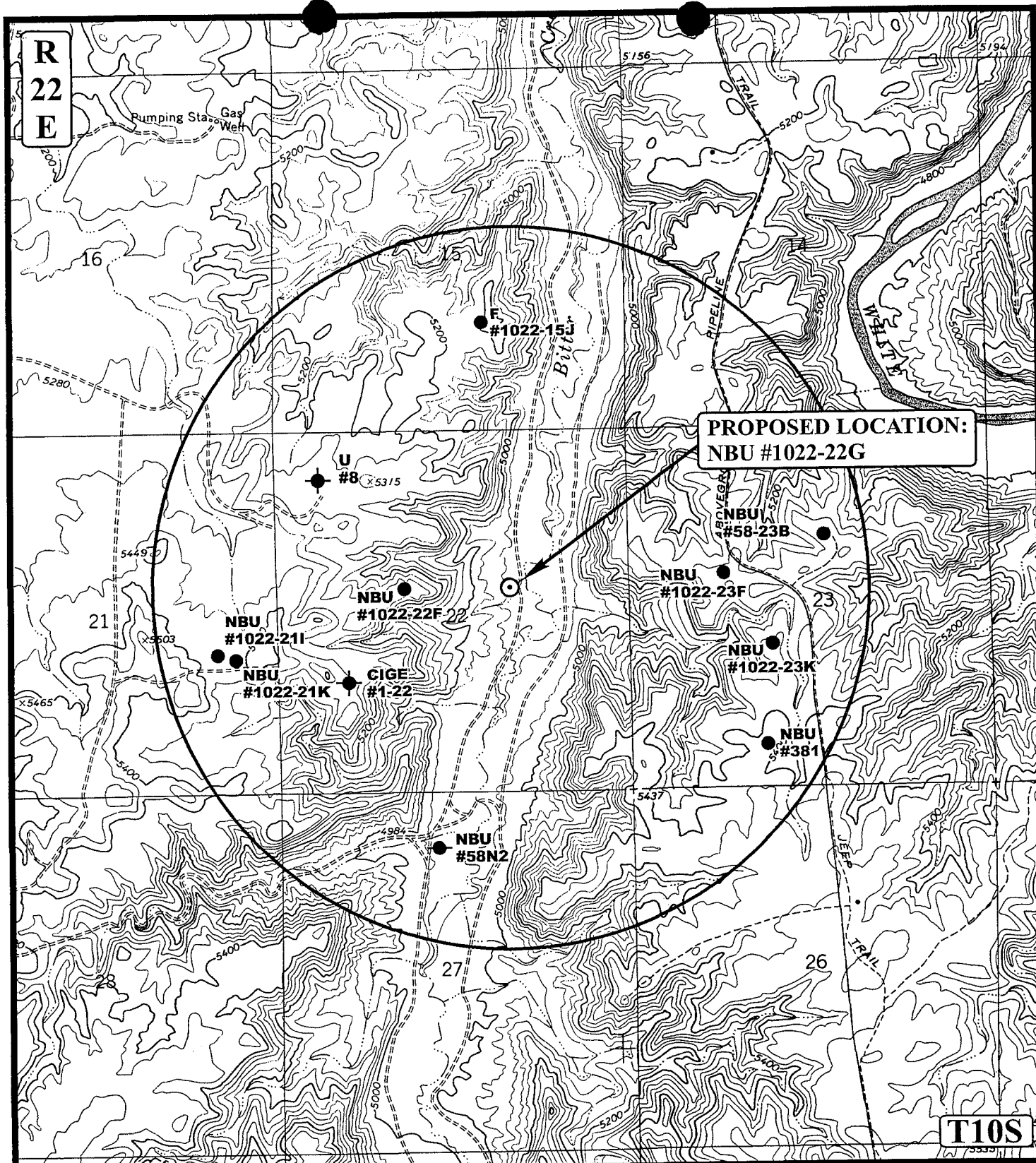
TOPOGRAPHIC  
 MAP

08 06 06  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00

**B**  
 TOPO





# LEGEND:

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊗ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



Kerr-McGee Oil & Gas Onshore LP

NBU #1022-22G

SECTION 22, T10S, R22E, S.L.B.&M.

2277' FNL 1791' FEL



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

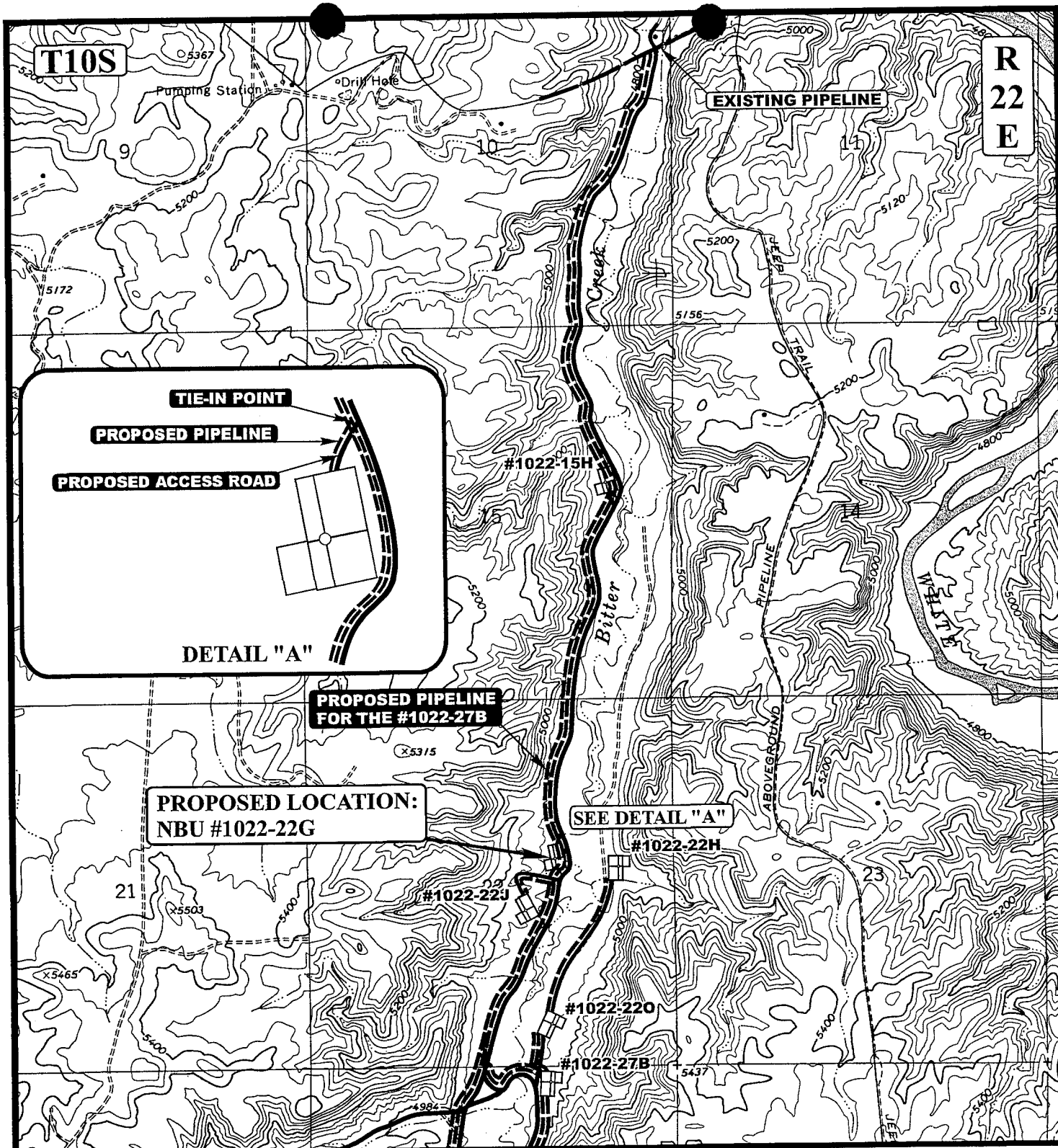
TOPOGRAPHIC  
 MAP

08 05 06  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00







APPROXIMATE TOTAL PIPELINE DISTANCE = 350' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)



**Kerr-McGee Oil & Gas Onshore LP**

**NBU #1022-22G**

**SECTION 22, T10S, R22E, S.L.B.&M.**

**2277' FNL 1791' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**08 06 06**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 10-18-06C.P.



# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-22G

PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH

SECTION 22, T10S, R22E, S.L.B.&M.

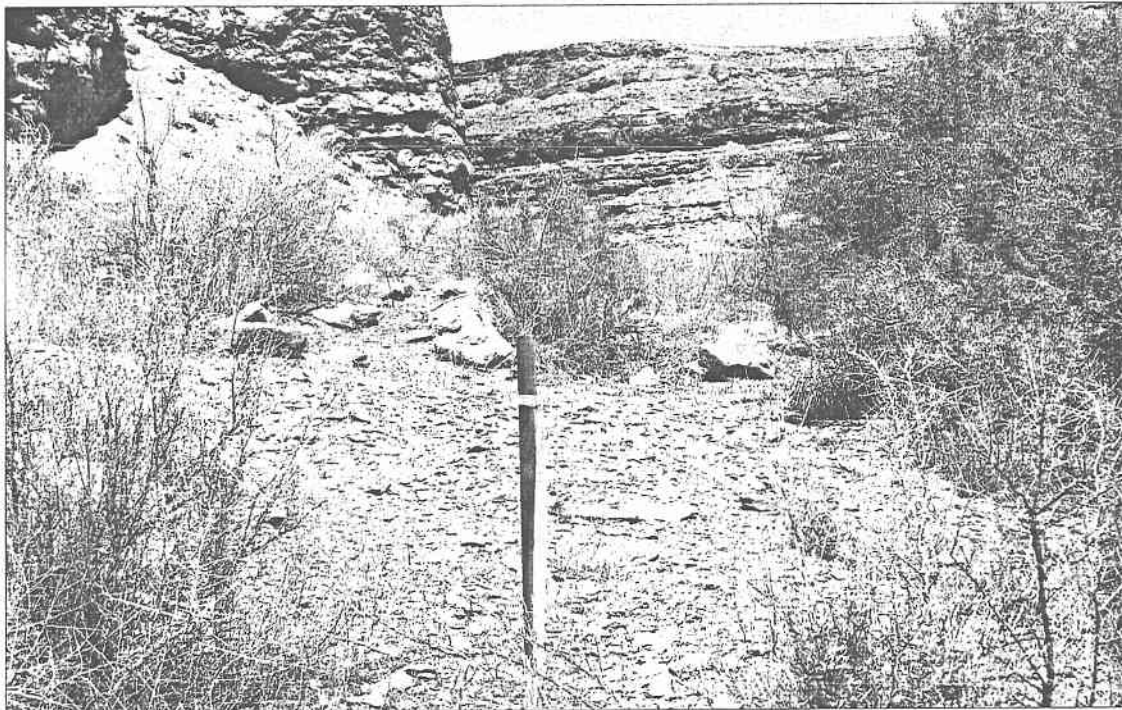


PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHEASTERLY

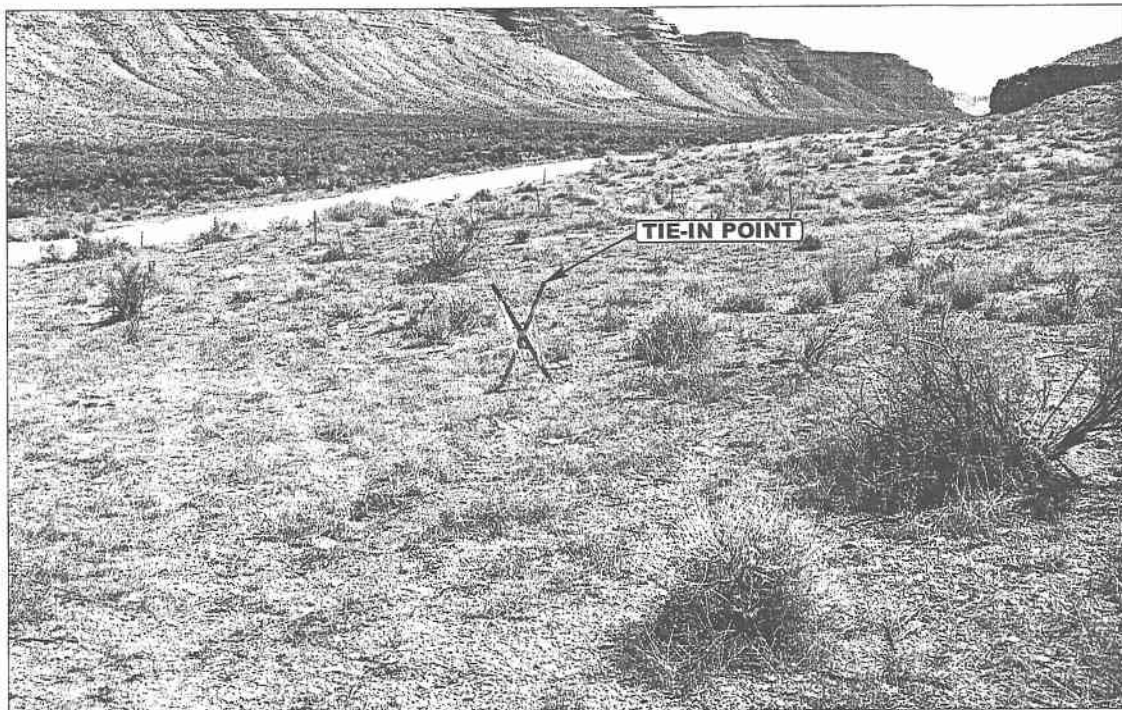


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

08  
MONTH

06  
DAY

06  
YEAR

PHOTO

TAKEN BY: B.H.

DRAWN BY: L.K.

REVISED: 00-00-00

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #1

## LOCATION LAYOUT FOR

NBU #1022-22G  
SECTION 22, T10S, R22E, S.L.B.&M.  
2277' FNL 1791' FEL

Proposed Access Road

Approx. Toe of Fill Slope

F-10.1'  
El. 914.7'

SCALE: 1" = 50'

DATE: 08-04-06

Drawn By: D.R.B.

REVISED: 10-18-06 C.P.

Existing Drainage

CONSTRUCT DIVERSION DITCH

### NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.

Approx. Top of Cut Slope

Pit Topsoil

FLARE PIT C-6.9'  
El. 931.7'

El. 936.7'  
C-21.9'  
(btm. pit)

Existing Drainage

RESERVE PITS  
(10' Deep)

Total Pit Capacity  
W/2' of Freeboard  
= 9,850 Bbls. ±  
Total Pit Volume  
= 2,780 Cu. Yds.

El. 939.6'  
C-24.8'  
(btm. pit)

15' WIDE BENCH

C-6.4'  
El. 931.2'

Reserve Pit Backfill & Spoils Stockpile

PIPE TUBS

PIPE RACKS

C-1.8'  
El. 926.6'

C-7.2'  
El. 932.0'

MUD TANKS

LIGHT PLANT

BOILER

COMPRESSOR

PUMP HOUSE

BOOSTER

C-4.9'  
El. 929.7'

PROPANE STORAGE

C-1.8'  
El. 926.6'

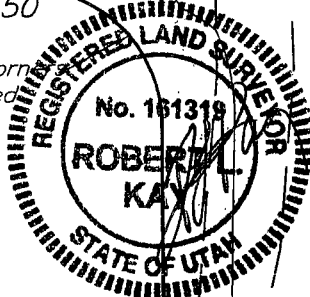
CONSTRUCT DIVERSION DITCH WITH RIP WRAP

Install CMP As Needed

TOILET  
TRAILER  
WATER TANK

F-14.1'  
El. 910.7'

F-5.7'  
El. 919.1'



### NOTES:

Elev. Ungraded Ground At Loc. Stake = 4926.6  
FINISHED GRADE ELEV. AT LOC. STAKE = 4924.8

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

## TYPICAL CROSS SECTIONS FOR

NBU #1022-22G

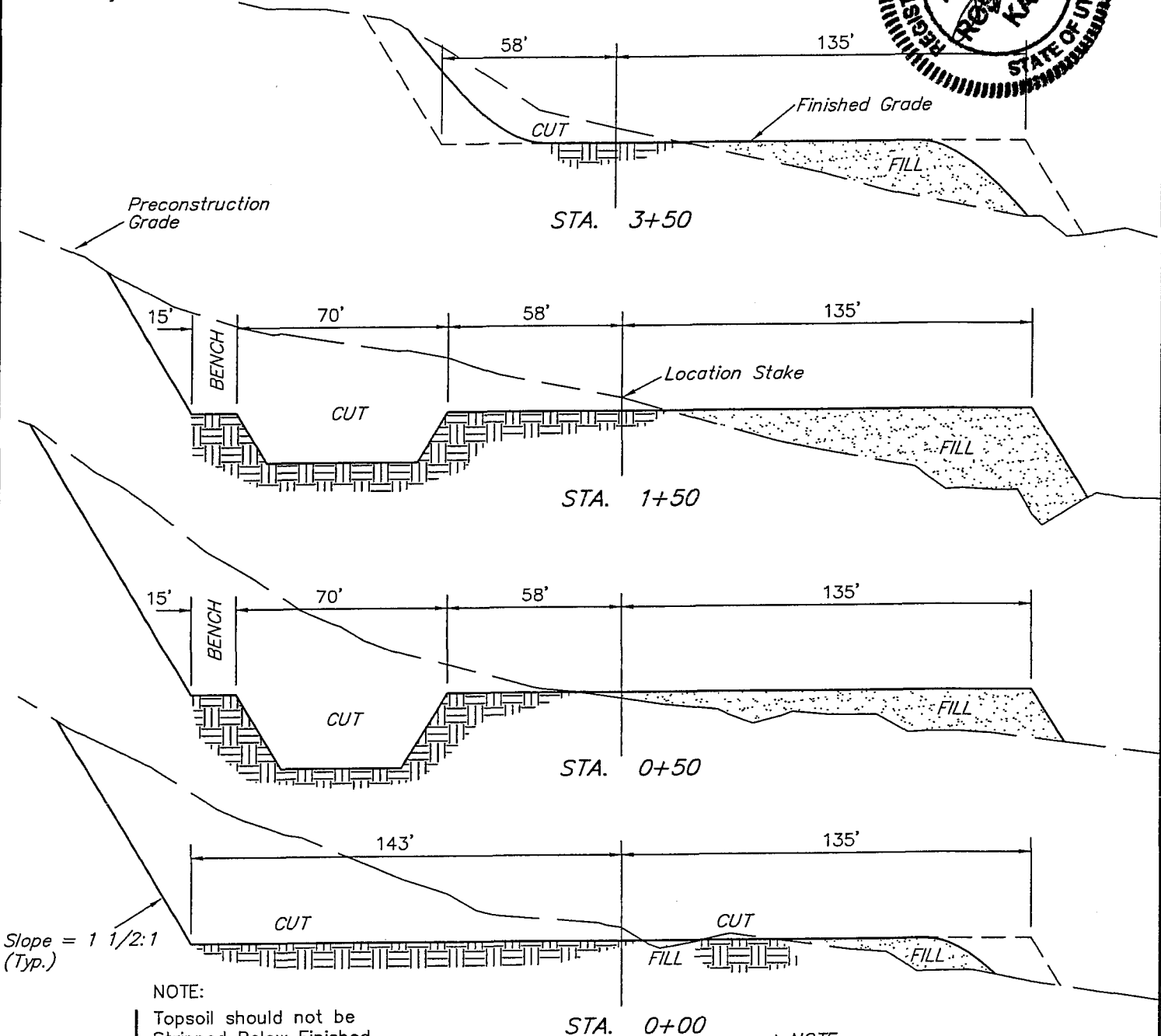
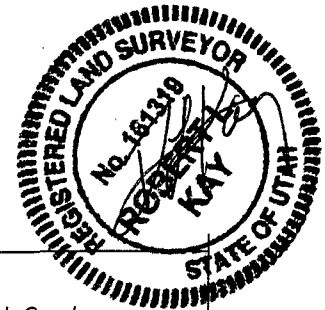
SECTION 22, T10S, R22E, S.L.B.&M.

2277' FNL 1791' FEL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 06-08-04

Drawn By: D.R.B.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 2,060 Cu. Yds.
Remaining Location	= 15,940 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 18,000 CU.YDS.</b>
<b>FILL</b>	<b>= 10,110 CU.YDS.</b>

EXCESS MATERIAL	= 7,890 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 3,450 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 4,440 Cu. Yds.

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85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/01/2006

API NO. ASSIGNED: 43-047-38794

WELL NAME: NBU 1022-22G

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

CONTACT: SHEILA UPCHEGO

PHONE NUMBER: 435-781-7024

**PROPOSED LOCATION:**

SWNE 22 100S 220E

SURFACE: 2277 FNL 1791 FEL

BOTTOM: 2277 FNL 1791 FEL

COUNTY: UINTAH

LATITUDE: 39.93539 LONGITUDE: -109.4222

UTM SURF EASTINGS: 634816 NORTHINGS: 4421568

FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-01198-B

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: WSMVD

COALBED METHANE WELL? NO

**RECEIVED AND/OR REVIEWED:**

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WY-2357 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-8496 )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

**LOCATION AND SITING:**

\_\_\_\_ R649-2-3.

Unit: NATURAL BUTTES

\_\_\_\_ R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

\_\_\_\_ R649-3-3. Exception

☒ Drilling Unit

Board Cause No: 173-14

Eff Date: 12-2-1999

Siting: 460' fr 11 bdr & 5 uncomm. trees

\_\_\_\_ R649-3-11. Directional Drill

COMMENTS: Sep, Separate SW

STIPULATIONS: 1- H. S. Approval  
2- Oil Surface





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

November 6, 2006

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2006 Plan of Development Natural Buttes Unit  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2006 within the Natural Buttes Unit, Uintah County, Utah.

API#	WELL NAME	LOCATION
------	-----------	----------

(Proposed PZ Wasatch/MesaVerde)

43-047-38799	NBU 1022-27F Sec 27 T10S R22E 1809 FNL 1878 FWL	
43-047-38795	NBU 1022-270 Sec 27 T10S R22E 1016 FSL 2127 FEL	
43-047-38808	NBU 1022-34C Sec 34 T10S R22E 0655 FNL 1908 FWL	
43-047-38807	NBU 1022-34D Sec 34 T10S R22E 1067 FNL 0825 FWL	
43-047-38802	NBU 1022-22H Sec 22 T10S R22E 2442 FNL 0792 FEL	
43-047-38803	NBU 1022-22P Sec 22 T10S R22E 0636 FSL 0296 FEL	
43-047-38792	NBU 1022-22J Sec 22 T10S R22E 2257 FSL 2209 FEL	
43-047-38793	NBU 1022-22O Sec 22 T10S R22E 0576 FSL 1798 FEL	
43-047-38794	NBU 1022-22G Sec 22 T10S R22E 2277 FNL 1791 FEL	
43-047-38806	NBU 1022-34G Sec 34 T10S R22E 1991 FNL 2080 FEL	
43-047-38804	NBU 1022-27B Sec 27 T10S R22E 0228 FNL 1825 FEL	
43-047-38880	NBU 1022-9K-2T Sec 09 T10S R22E 2126 FSL 1483 FWL	

Our records indicate the 1022-270 is closer than 460 feet from the Natural Buttes Unit boundary.

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:11-6-06





**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

November 7, 2006

Kerr McGee Oil & Gas Onshore LP  
1368 S 1200 E  
Vernal, UT 84078

Re: Natural Buttes Unit 1022-22G Well, 2277' FNL, 1791' FEL, SW NE, Sec. 22,  
T. 10 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38794.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Kerr McGee Oil & Gas Onshore LP  
**Well Name & Number** Natural Buttes Unit 1022-22G  
**API Number:** 43-047-38794  
**Lease:** UTU-01198-B

**Location:** SW NE                      **Sec.** 22                      **T.** 10 South                      **R.** 22 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

5. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.



**State of Utah**

**Department of  
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*Lieutenant Governor*

March 9, 2007

Sheila Upchego  
Kerr-McGee O&G Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

Re: APD Rescinded at the request of Kerr McGee

Dear Ms. Upchego:

Enclosed find the APD list that was requested to be rescinded to Kerr-McGee per Raleen White and you dated March 9, 2007. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective March 9, 2007.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Vernal

<u>Well Name</u>	<u>API Number</u>
NBU 1022-35I	43-047-35677
NBU 1022-19L	43-047-37598
NBU 1022-21-0	43-047-37174
NBU 1022-19K	43-047-37783
NBU 1022-22G	43-047-38794
NBU 1022-21A	43-047-36089
NBU 1022-19M	43-047-37599
NBU 1022-19N	43-047-37597
NBU 1022-21J	43-047-37175
NBU 1022-21P	43-047-37173
NBU 1022-22C	43-047-37177
NBU 1022-22E	43-047-37176
NBU 1022-29A	43-047-37101
NBU 1022-30I	43-047-37600
NBU 1022-30J	43-047-37551
NBU 1022-30N	43-047-37550
BITTER CREEK 1122-3H	43-047-38822
BITTER CREEK 1122-3I	43-047-38809
BITTER CREEK 1122-5M	43-047-38121
BITTER CREEK 1122-6B	43-047-38118
BITTER CREEK 1122-6F	43-047-38117
BITTER CREEK 1122-6G	43-047-38116
BITTER CREEK 1122-6H	43-047-38115
BITTER CREEK 1122-6J	43-047-38114
BITTER CREEK 1122-6L	43-047-38112
BITTER CREEK 1122-6P	43-047-38110
FEDERAL 1021-24E	43-047-38175
FEDERAL 1021-24G	43-047-38174
FEDERAL 1021-24K	43-047-38176
FEDERAL 1021-24M	43-047-38177
FEDERAL 1022-29E	43-047-37102
FEDERAL 1022-29G	43-047-37357
FEDERAL 1022-31M	43-047-37358
FEDERAL 1022-31O	43-047-37104
MULLIGAN 823-3F	43-047-38620
MULLIGAN 823-3P	43-047-38619
MULLIGAN 823-4B	43-047-38621
MULLIGAN 823-13L	43-047-38626
MULLIGAN 823-20O	43-047-38628
MULLIGAN 822-13G	43-047-36556
MULLIGAN 823-18E	43-047-36557